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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,143	06/27/2001	Antti Kansakoski	871.0014.USU	4012
29683	7590	11/23/2004	EXAMINER	
HARRINGTON & SMITH, LLP 4 RESEARCH DRIVE SHELTON, CT 06484-6212			NGUYEN, DUNG X	
			ART UNIT	PAPER NUMBER
			2631	

DATE MAILED: 11/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/893,143

Applicant(s)

KANSAKOSKI ET AL.

Examiner

Dung X Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 9, 15, 16, 19, 21 and 24 is/are rejected.
- 7) ☐ Claim(s) 2 - 8, 10 - 14, 17, 18, 20, 22, 23, and 25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1, 9, 15, 16, and 21 are rejected** under 35 U.S.C. 102(e) as being anticipated by Moon et al. (US patent # 6,577,608 B1).

Regarding claim 1, Moon et al. discloses (figures 3 and 10):

- An RF section for receiving a CDMA signal (block 140 of figure 10 and abstract, lines 1 – 2);
- Blocks 121, 122, ...12N, and 130 corresponded to a circuit for determining an instantaneous total received power (Io) of the received CDMA signal (abstract and column 10, lines 40 – 51);
- A searcher (block 110 of figure 10) that is one of enabled for operation or disabled from operation in accordance with the value of Io (column 1, lines 19 – 37, column 6, line 57 to column 7, line 46, and column 10, lines 40 – 51).

Regarding claim 9, the limitations are analyzed in the same manner set forth as claim 1.

Regarding claim 15, Moon et al. discloses (figures 3 and 10):

- An RF section for receiving a CDMA signal (block 140 of figure 10 and abstract, lines 1 – 2);

- Storing samples of the received CDMA signal into a buffer (column 4, line 63 to column 5, line 17);
- Blocks 121, 122, ...12N, and 130 corresponded to a circuit for determining an instantaneous total received power (I_o) of the received CDMA signal (abstract and column 10, lines 40 – 51);
- Using the maximum value of I_o (column 1, lines 19 – 20) to identify one of m segments of the searcher (block 110 of figure 10) buffer on which a searcher (block 110 of figure 10) is to be enabled for operation (column 1, lines 19 – 37, column 6, line 57 to column 7, line 46, and column 10, lines 40 – 51).

Regarding claim 16, Moon et al. discloses (figures 3 and 10):

- Receiving a CDMA signal (block 140 of figure 10 and abstract, lines 1 – 2) and storing samples of the received CDMA signal into a searcher (block 110 of figure 10) (column 4, line 63 to column 5, line 17) while determining an instantaneous total received power (I_o) of the received CDMA signal (abstract and column 10, lines 40 – 51); and
- Selectively one of generating or not generating a searcher trigger signal in accordance with the value of I_o (column 1, lines 19 – 37, column 6, line 57 to column 7, line 46, and column 10, lines 40 – 51), wherein when generated the searcher trigger signal causes a searcher (block 110 of figure 10) to process the stored samples (column 4, line 63 to column 5, line 17 and column 1, lines 19 - 37).

Regarding claim 21, Moon et al. discloses (figures 3 and 10):

- Receiving a CDMA signal (block 140 of figure 10 and abstract, lines 1 – 2);
- A memory for storing samples of the received CDMA signal (column 4, line 63 to column 5, line 17);
- Digital RX part of figure 10 corresponded to a signal processor circuit for determining, during a time that the samples are being stored in the memory (column 4, line 63 to column 5, line 17), an instantaneous total received power (I_o) of the received CDMA signal for selectively one of generating or not generating a searcher trigger signal in accordance with the value of I_o wherein when generated the searcher trigger signal

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causes a searcher (block 110 of figure 10) to process the stored samples (column 1, lines 19 – 37, column 6, line 57 to column 7, line 46, and column 10, lines 40 – 51).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. **Claims 16 and 24 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Moon et al. (US patent # 6,577,608 B1), in view of Eriksson et al. (US patent # 6,563,891 B1).

Regarding claim 19, as followed by the limitations analyzed in claim 16, Moon et al. differs from the instant claimed invention that it does not show the step of wherein the searcher buffer stores Inphase and Quadrature (I/Q) samples.

However, Erickson et al. discloses (figure 8) that memory (100) and mode-selection controller (101) corresponding to a searcher buffer for storing I and Q samples.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Moon et al. and Erickson et al. as providing the requirements of the instant claimed invention for storing I and Q samples in case the RF section splits the signal into I and Q samples.

Regarding claim 24, the limitations are analyzed in the same manner set forth as claim 19.

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Allowable Subject Matter

5. **Claims 2 – 8, 10 – 14, 17, 18, 20, 22, 23, and 25 are objected** to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Documents:

Ariyavisitakul et al. (US patent # 5,794,153) discloses an estimating PCS traffic from radio port measurements.

Other Publications:

Rick et al. "Parallel Acquisition in Mobile DS-CDMA Systems", IEEE Transactions on Communications, vol. 45, no. 11. November 1997, pp. 1466 – 1476.

Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung X. Nguyen whose telephone number is (571) 272-3010. The examiner can normally be reached on Monday through Friday from 8:00 AM to 17:00 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Ghayour Mohammad H. can be reached on (571) 272-3021. The fax phone numbers for this group is (571) 273-3021.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

DXN

November 13, 2004


MOHAMMED GHAYOUR
SUPERVISORY PATENT EXAMINER